

FEDERAL COMMUNICATIONS COMMISSION

CLASS OF STATION FM

STH

The following application is submitted for action by the Chief, Broadcast Bureau.

ST	FILE NUMBER	CALL	APPLICANT AND LOCATION	NATURE OF APPLICATION
CA	BPED -901004MM N/M	NEW 90.9MHZ	SKYRIDE UNLIMITED, INCORPORATED SHAFTER CA	CP FOR NEW FM EDUCATIONAL ON: FREQUENCY: 90.9 MHZ; ERP:50.0 KW H&V; HAAT: 100 METERS H&V 35 24 55 119 14 01

LICENSE EXPIRATION DATE _____

CHIEF, LICENSE DIVISION

RECOMMENDATION: GRANT() CONSTRUCTION DATES, START _____ END _____
 CONTESTED () UNCONTESTED ()

APPROVED _____

FOR CHIEF, BROADCAST BUREAU

F.C.C.-WASHINGTON, D.C.

ORIGINAL

RECEIVED

OCT 4 - 1990

LAW OFFICES

COHN AND MARKS

OCT 10 4 01 PM '90

Federal Communications Commission
Office of the Secretary

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October 4, 1990

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
Washington, D.C. 20554


Dear Ms. Searcy

On behalf of Skyride Unlimited, Incorporated, there is transmitted herewith, in triplicate, an application for authority to construct and operate a new noncommercial, educational FM station on Channel 215B (90.9 MHz) to serve Shafter, California. This application is mutually exclusive with that filed by Shepherd Communications, Inc. (FCC File No. BPED-891113ME).

As the applicant is a not-for-profit corporation, no filing fees are assessed in connection with the submission of this application.

If any additional information is desired in connection with this matter, please contact the undersigned counsel.

Very truly yours


Brian M. Madden

Enclosures

ORIGINAL

APPLICATION FOR CONSTRUCTION PERMIT FOR
NONCOMMERCIAL EDUCATIONAL BROADCAST STATION
(Carefully read instructions before filing form) Return only form to FCC

RECEIVED

Section I - GENERAL INFORMATION OCT 4 - 1990

For Commission Use Only

File No.

BPED-900004MM
30110-23-90

1. Name of Applicant SKYRIDE UNLIMITED, INCORPORATED			Federal Communications Commission Office of the Secretary			Send notices and communications to the following person at the address below:		
Street Address or P.O. Box P. O. Box 1092			City Shafter			State CA		
Telephone No. (Include Area Code) (805) 758-6777			ZIP Code 93263			Name Brian Madden %COHN & MARKS		
Street Address or P.O. Box 1333 New Hampshire Ave., NW #600			City Washington			State D.C.		
Telephone No. (Include Area Code) (202) 452-4819			ZIP Code 20036					

2. This application is for:

☐

AM

☒

FM

☐

TV

(a) Channel No. or Frequency 215 (90.9 MHz.)

(b) Principal Community	City	State
	Shafter	CA

(c) Check one of the following boxes:

☒ Application for NEW station

☐ MAJOR change in licensed facilities; call sign: _____

☐ MINOR change in licensed facilities; call sign: _____

☐ MAJOR modification of construction permit; call sign: _____

File No. of construction permit: _____

☐ MINOR modification of construction permit; call sign: _____

File No. of construction permit: _____

☐ AMENDMENT to pending application; application file number: _____

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application?

☐

Yes

☒

No

If Yes, state:	Call letters	BPED	Frequency	90.9 MHz	State	CA
		SHAFER		-901004MHz NEW		
SKYRIDE UNLIMITED, INCORPORATED						

Entered
10/24/90 -DLH

Section II - LEGAL QUALIFICATIONS

Name of Applicant

Skyride Unlimited, Incorporated

1. Applicant is: (Check one box below)

☐ (a) governmental or public educational agency, board or institution

☐ (b) private nonprofit educational institution

☒ (c) Other (specify) Non-profit public benefit corporation

2. For applicants 1(c) only, describe in an Exhibit the nature and educational purposes of the applicant.

Exhibit No.
II-A

3. For applicants 1(c) applying for a new noncommercial educational television station only, describe in an Exhibit how the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural and civic segments of the principal community to be served.

Exhibit No.
N/A

4. Describe in an Exhibit how the proposed station will be used, in accordance with 47 C.F.R. Section 73.503 or Section 73.621, for the advancement of an educational program.

Exhibit No.
II-B

5. Is there any provision contained in any by-laws, articles of incorporation, partnership agreement, charter, statute or other document which would restrict the applicant in advancing an educational program or complying with any Commission rule, policy or provision of the Communications Act of 1934, as amended?

☐ Yes ☒ No

If Yes, provide particulars in an Exhibit.

Exhibit No.
N/A

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

6. (a) Is the applicant in violation of the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments? (See Instruction B to Section II.)

☐ Yes ☒ No

(b) Will any funds, credits or other financial assistance for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or their agents?

☐ Yes ☒ No

If the answer to (b) above is Yes, attach an Exhibit giving full disclosure concerning this assistance.

Exhibit No.
N/A

7. (a) Has an adverse finding been made or an adverse final action taken by any court or administrative body as to the applicant or any party to this application in a civil or criminal proceeding brought under the provisions of any law related to the following:

Any felony; broadcast related antitrust or unfair competition; criminal fraud or fraud before another governmental unit; or discrimination?

☐ Yes ☒ No

(b) Is there now pending in any court or administrative body any proceeding involving any of the matters referred to in (a) above?

☐ Yes ☒ No

If the answer to (a) and/or (b) above is Yes, attach an Exhibit giving full disclosure concerning persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), a statement of the facts upon which the proceeding is or was based or the nature of the offense alleged or committed, and a description of the current status or disposition of the matter.

Exhibit No.
N/A

PARTIES TO APPLICATION

8. Complete the following Table with respect to all parties to this application:

(NOTE: If the applicant considers that to furnish complete information would pose an unreasonable burden, it may request that the Commission waive the strict terms of this requirement with appropriate justification.)

INSTRUCTIONS: If applicant is a corporation or an unincorporated association with 50 or fewer stockholders, stock subscribers, holders of membership certificate or other ownership interest, fill out all columns, giving the information requested as to all officers, directors and members of governing board. In addition, give the information as to all persons or entities who are the beneficial or record owners of or have the right to vote capital stock, membership or ownership interests or are subscribers to such interests. If the applicant has more than 50 stockholders, stock subscribers or holders of membership certificates or other ownership interests, furnish the information as to officers, directors, members of governing board, and all persons or entities who are the beneficial or record owners of or have the right to vote 1% or more of the capital stock, membership or ownership interests. If applicant is a governmental or public educational agency, board or institution, fill out columns (a), (b), and (c) as to all members of the governing board and chief executive officers.

Name and Residence Address(es) (a)	Office Held (b)	Director or Member of Governing Board		% of: Ownership (O) or Voting Stock (VS) or Membership (M) (d)
		YES	NO	
		(c)		
Mr. Michael E. McCutchan 3012 Brock Way Bakersfield, CA 93306	President	XXX		<u>DOES NOT APPLY</u> (This is a non-stock, non- membership, non-profit corporation)
Mr. John M. Rader 3707 Rampart Street Bakersfield, CA 93306	Vice President	XXX		
Mr. Don Bevilacqua 505 Ridgeway Drive Bellingham, WA 98225	Secretary/ Treasurer	XXX		

Section II - LEGAL QUALIFICATIONS (Page 3)

9. Does the applicant or any party to this application have, or have they had, any interest in:

(a) a broadcast station, or pending broadcast station application before the Commission?

☒ Yes ☐ No

(b) a broadcast application which has been dismissed with prejudice by the Commission?

☒ Yes ☐ No

(c) a broadcast application which has been denied by the Commission?

☐ Yes ☒ No

(d) a broadcast station, the license of which has been revoked?

☐ Yes ☒ No

(e) a broadcast application in any pending or concluded Commission proceeding which left unresolved character issues against the applicant?

☐ Yes ☒ No

If the answer to any of the questions in (a)-(e) above is Yes, state in an Exhibit the following information:

Exhibit No.
II-C

- (1) Name of party having interest;
- (2) Nature of interest or connection, giving dates;
- (3) Call letters of stations or file number of application or docket; and
- (4) Location.

SECTION III - FINANCIAL QUALIFICATIONS

Note: If this application is for a change in an operating facility, DO NOT fill out this Section.

1. Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration? ☐ Yes ☒ No

2. Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision? ☐ Yes ☒ No

NOTE: If either Questions 1 or 2 is answered "Yes," your application cannot be granted until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on your part is required. If you rely on funds from a source specified in Question 2, you must advise the F.C.C. when the funds are committed or appropriated. This should be accomplished by letter amendment to your application, in triplicate, signed in the same manner as the original application, and clearly identifying the application to be amended.

3. The applicant certifies, except as noted above, that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three months without additional funds. ☒ Yes ☐ No

SECTION IV - PROGRAM SERVICE STATEMENT

Attach as an Exhibit, a brief description, in narrative form, of the planned programming service relating to the issues of public concern facing the proposed service area.

Exhibit No.
IV-A

NOTE: No program service statement need be filed where the proposed station's programming would be wholly "instructional" as that type of programming is defined in the Instructions to this Section.

Exhibit II-A

Skyride Unlimited, Incorporated is a nonprofit public benefit corporation established under the provisions of the Public Benefit Corporation Law of the State of California for the specific purpose of the advancement of educational programs, including broadcasting, to enhance the values and mores of the American way of life.

Skyride Unlimited, Incorporated will utilize the facilities of the proposed station to provide programing designed to enhance the values and mores of the American way of life. A more complete description of the programing philosophy of the applicant is set forth in Exhibit IV-A.

Exhibit II-C

Each of the current members and officers of Skyride Unlimited, Incorporated has extensive experience in radio broadcasting. Michael McCutchan is currently the Station Manager of Station KERI (AM), Wasco-Greenacres, California. John Rader is an employee of Station KERI, having worked throughout the past decade there and at other stations in the Bakersfield area and, earlier (beginning in 1949), at stations outside that area. Don Bevilacqua is the President, a director and owner of 85% of the stock of KWSO, Inc., which is the licensee of Station KERI. The application for renewal of the license for Station KERI is pending.

Mr. Bevilacqua is also Vice President, a director and owner of 33.3% of the stock of Birch Bay Broadcasting Company, Inc., licensee of Station KARI, Blaine, Washington. The application for renewal of the license of Station KARI is pending.

In 1985, Mr. Bevilacqua was a limited partner (exempt from attribution) of Skyride Unlimited, a California Limited Partnership, which was an applicant for a new FM station at Woodlake, California (File No. BPH-850711MV). This application was dismissed pursuant to a settlement agreement approved by the presiding Administrative Law Judge in MM Docket No. 87-430. Mr. Bevilacqua was also an applicant for a new commercial FM station to serve Shafter, California (File No. BPH-880216MR) which was dismissed pursuant to a settlement agreement approved by the presiding Administrative Law Judge in MM Docket No. 90-36. Finally, KWSO, Inc. was an applicant for a new FM station to serve Delano, California (File No. BPH-10750, filed September, 1977), which was dismissed pursuant to a settlement agreement approved by the presiding Administrative Law Judge in BC Docket Nos. 80-154-56.

SKYRIDE UNLIMITED, INCORPORATED

CORPORATE PROGRAMING POLICY

The Articles of Incorporation of SKYRIDE UNLIMITED, INCORPORATED state the following:

"The specific purpose is the advancement of educational programs to enhance the values and mores of the American way of life."

The regulations of SKYRIDE UNLIMITED, INCORPORATED require that it be non-profit and that air time and services shall not be sold or rented and that operating revenues shall be primarily derived from donations, gifts, bequests and grants.

SKYRIDE UNLIMITED, INCORPORATED is governed by the rules of the FEDERAL COMMUNICATION COMMISSION as well as by any applicable statutes.

SKYRIDE UNLIMITED, INCORPORATED PROGRAMING PHILOSOPHY

Provide wholesome programing and information in a positive manner that will encourage good citizenship, strengthen family life and enhance the over-all values of our listeners.

Music will be programed to relax, encourage and otherwise brighten the day for our listeners. Music will be programmed in as attractive manner as possible.

Specific programs for specific groups of people will be broadcast at the best times for them to listen as ascertained by surveys.

Public service programs as well as news programs will use various sources for material. For example, news coverage of the Shafter City Council; a program developed by us with the Kern County Board of Trade (members of the Corporation have already discussed this concept with the Board of Trade and they have consented to help produce this program when called upon); local Agri-Business programs; programs that deal with parenting; grand-parenting; marriage; Senior Citizens and the like.

To accomplish these programing goals, SKYRIDE UNLIMITED, INCORPORATED plans to keep in close communications with the station's listeners and community leaders to be sure that SKYRIDE UNLIMITED, INCORPORATED is programming to meet the listener's concerns.

The major thrust of our "Programming Philosophy" is the implementation of our stated policy; namely:

"...programing that will enhance the values and mores of the American way of life."

JAMES B. HATFIELD, PE
BENJAMIN F. DAWSON III, PE
THOMAS M. ECKELS, PE

PAUL W. LEONARD, PE
L.S. CHRISTIANE ENSLOW

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ENGINEERING REPORT:

APPLICATION FOR A NEW NON-COMMERCIAL
EDUCATIONAL FM STATION
CHANNEL 215 B, 90.9 MHZ

SHAFTER, CALIFORNIA

SKYRIDE UNLIMITED, INC.

9/90

TABLE OF CONTENTS

- 1. Purpose of Application**
- 2. Allocation Considerations**
 - a. TV Channel 6 Protection**
 - b. FM Channel Study**
- 3. Facilities Proposed**
 - a. NIER Study**
 - b. Blanketing Contour**
 - c. Facilities and Coverage Contours**
- 4. Exhibits Per FCC Form 301, Section V-B**
 - a. Exhibit VB-8** Vertical Plan Sketch
 - b. Exhibit VB-10-A** Directional Antenna Horizontal Plane Composite Relative Field Pattern
 - c. Exhibit VB-10-B** Vertical Plane Relative Field Pattern
 - d. Exhibit VB-10-C** Horizontal Plane Composite Radiation Pattern Tabulation
 - e. Exhibit VB-10-D** Directional Antenna Statement
 - f. Exhibit VB-15** Site Map
 - g. Exhibit VB-14** Proposed Coverage Contours
 - h. Exhibit VB-14A** 60 dBu Contour on Census Map
 - i. Exhibit VB-21** Allocation Study
 - j. Exhibit VB-24A** Map Showing Predicted Interference to KSBY-TV, San Luis Obispo, California
 - k. Exhibit VB-24B** Location of Predicted Interference Area on 1:250,000 Scale Map
 - l. Exhibit VB-24C** Predicted Interference Area on Census Map
- 5. FCC Form 340, Section V-B**
- 6. Statement of Engineer**

**HATFIELD & DAWSON
CONSULTING ENGINEERS**

1. Purpose of Application

This Engineering Report is part of an application for a new non-commercial educational FM station at Shafter, California by Skyride Unlimited, Inc. The proposed station will operate on FM channel 215 B (90.9 MHz) with a directional antenna and a maximum lobe effective radiated power of 50.0 kilowatts (16.99 dBk) at an antenna height above average terrain of 100 meters. The ERP specified is the maximum for Class B facilities at this antenna height, as calculated in accordance with the Commission's Rules.

2. Allocation Considerations

The attached computerized data summary shows that the proposed operation meets the mileage spacing requirements for a Class B station with respect to other stations spaced 53 and 54 channels from channel 215. The only other stations shown in the channel study which require further study to demonstrate the absence of prohibited overlap are: KPFK, Channel 214B, Los Angeles, California and KCPB, Channel 216B, Thousand Oaks, California. The attached Allocation Study, Exhibit VB-21, which shows the service and interference contours of the proposed station and these stations, demonstrates that the proposed operation complies with §73.509 of the Commission's Rules.

TV Channel 6 Protection

The transmitter site of Channel 6 station KSBY-TV, San Luis Obispo, California is located 127.8 kilometers from the proposed transmitter site. The predicted interference area produced within the KSBY-TV 47 dBu F(50,50) contour by the proposed operation, calculated following the procedure specified in §73.525(e)(1) of the Commission's Rules,

**HATFIELD & DAWSON
CONSULTING ENGINEERS**

is shown in Exhibits VB-24A through VB-24C. Exhibit VB-24A shows the predicted KSBY-TV F(50,50) contours and the proposed F(50,10) contours used to determine the location of the predicted interference area. Exhibit VB-24A also shows the location of the KGET-TV 80 dBu F(50,50) contour. The terrain data used to generate the contour distances for KSBY-TV and the proposed station were taken from the NGDC 30 second digitized terrain database. Distances to the KGET-TV 80 dBu F(50,50) contour were taken from the most recent KGET-TV Form 301 (and related exhibits) on file with the Commission.

The predicted interference area encompasses 47.6 square kilometers and contains a population of 1067 persons, calculated using the methods outlined in §73.525(e)(2) of the Commission's Rules. The population figures for each County Subdivision were taken from the estimated 1-1-1990 population data for Kern County, as shown in the document titled: *Kern County Statistical and Economic Data*, published by the Kern County Board of Trade. Exhibit VB-24B shows that the interference area actually falls over an area which, in reality, is mostly unpopulated.

Because the predicted interference area contains fewer than 3000 persons, the proposed operation complies with the requirements of §73.525(c) of the Commission's Rules. As shown in Exhibits VB-24A and VB-24B, the predicted interference area is also located within the predicted 80 dBu F(50,50) contour of KGET-TV, Channel 17, Bakersfield, California. The predicted interference area is located entirely outside the KSBY-TV Grade A contour and entirely outside the Santa Barbara-Santa Maria-San Luis Obispo ADI.

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KGET-TV has NBC as its only network affiliation, as does KSBY-TV. Therefore the entire population within the predicted interference area can be subtracted under the provisions of §73.525(e)(3)(iii) of the Commission's Rules. Therefore, for purposes of the showing required by §73.525(c), the predicted interference area contains no population.

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CONSULTING ENGINEERS

FM SEPARATION STUDY

Job Title :Shafter NCE FM

Separation Buffer 100 km

FCC DB Date : 08/28/90

Channel 215B (90.9 MHz)

Coordinates : 35-24-55 119-14-01

Call Status	City State	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-Tru	Dist. (km)	Req. (km)
KMRO LIC	Camarillo CA	BLED861107KD	212B 90.3	4.4 381.0	34-24-47 119-11-10	177.8	111.28 37.28	74 CLEAR
KUFW LIC	Woodlake CA	BLED830524AA	213B 90.5	0.85 761.0	36-17-09 118-50-15	20.1	103.02 29.02	74 CLEAR
K213AR CP	Las Cruces CA	BPFT860131TW	213D 90.5	.002 .0	DA 34-31-32 119-57-28	213.9	118.82 .00	0 TRANS
TRANSLATOR FOR KEAR, SAN FRANCISCO, CA.								
K213AR LIC	Las Cruces CA	BLFT851210TC	213D 90.5	.015 .0	DA 34-31-36 119-58-39	214.7	119.73 .00	0 TRANS
TRANSLATOR FOR KEAR, SAN FRANCISCO, CA.								
NEW-T APP	Lompoc CA	BPFT890531TB	213D 90.5	.007 .0	DA 34-44-29 120-26-49	236.2	133.56 .00	0 TRANS
Translator for WMBIFM, Chicago, IL								
NEW-T APP	Lompoc CA	BPFT900508TA	213D 90.5	.007 .0	DA 34-44-29 120-26-49	236.2	133.56 .00	0 TRANS
Translator for WMBIFM, Chicago, Illinois								
KFSR LIC	Fresno CA	BLED880314KC	214A 90.7	2.55 20.0	36-48-42 119-44-43	343.7	161.65 48.65	113 CLEAR
KPFK LIC	Los Angeles CA	BLED830425AF	214B 90.7	110. 863.0	34-13-45 118-04-03	140.8	169.41 .41	169 CLOSE
GRANDFATHERED AT 110KW @ 863M HAAT.								
NEW APP	Shafter CA	BPED891113ME	215B 90.9	50.0 86.0	DA 35-25-10 119-11-54	81.7	3.25 -237.75	241 SHORT
NEW APP	Bakersfield CA	BPED890815MC	215B 90.9	50.0 140.0	DA 35-30-53 119-03-41	54.6	19.14 -221.86	241 SHORT
K215AO LIC	Oil Dale CA	BLFT840508MB	215D 90.9	.008 .0	35-29-04 118-53-19	76.1	32.26 .00	0 TRANS
TRANSLATOR FOR KVPR, FRESNO, CA.								
K215AG LIC	Solvang, etc. CA	BLFT830509ME	215D 90.9	.0 .0	34-31-32 119-57-28	213.9	118.82 .00	0 TRANS
TRANSLATOR FOR KCBX, SAN LUIS OBISPO, CA.								

FM SEPARATION STUDY

Job Title :Shafter NCE FM

Separation Buffer 100 km

FCC DB Date : 08/28/90

Channel 215B (90.9 MHz)

Coordinates : 35-24-55 119-14-01

Call Status	City State	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-Tru	Dist. (km)	Req. (km)
K215AH LIC	Avila Beach CA	BLFT830509MF	215D 90.9	.0	35-10-33 120-43-42	259.3	138.54 .00	0 TRANS
TRANSLATOR FOR KCBX, SAN LUIS OBISPO, CA.								
K215AF LIC	Cambria CA	BLFT830509MD	215D 90.9	.0	35-32-59 121-04-30	275.7	167.78 .00	0 TRANS
TRANSLATOR FOR KCBX, SAN LUIS OBISPO, CA.								
KHDC LIC	Chualar CA	BLED810708AC	215A 90.9	3.00 59.0	36-34-54 121-26-34	303.8	237.54 59.54	178 CLEAR
K216BM APP	Bishop, Swall Meadow CA	BPFT900718TB	215D 90.9	.005 .0	37-24-48 118-11-08	22.6	240.82 .00	0 TRANS
Translator KUNR, Reno, Nevada-To Channel 215								
KBDG LIC	Turlock CA	BLED791015AC	215A 90.9	.135 23.0	37-29-59 120-49-41	328.9	271.90 93.90	178 CLEAR
KCPB LIC	Thousand Oaks CA	BLED791109AN	216B 91.1	4.8 390.0	34-24-47 119-11-10	177.8	111.28 -57.72	169 SHORT
K216AG LIC	Cayucos CA	BLFT830509MC	216D 91.1	.0	35-26-40 120-53-31	271.7	150.64 .00	0 TRANS
TRANSLATOR FOR KCBX, SAN LUIS OBISPO, CA.								
K CPR LIC	San Luis Obispo CA	BLED1467	217A 91.3	2.00 -107.0	35-17-58 120-40-26	264.8	131.55 62.55	69 CLEAR
NEW-T APP	Santa Maria CA	BPFT881229TB	218D 91.5	.014 .0	34-50-05 120-22-57	238.6	122.95 .00	0 TRANS
Translator for WMBIFM, Chicago, IL								
NEW-T APP	Santa Maria CA	BPFT900508TB	218D 91.5	.014 .0	34-50-05 120-22-57	238.6	122.95 .00	0 TRANS
Translator for WMBIFM, Chicago, Illinois								
KSJV LIC	Fresno CA	BLED800806AB	218B 91.5	16.0 265.0	36-38-15 118-56-35	10.8	138.13 64.13	74 CLEAR
KUSC LIC	Los Angeles CA	BLED870210KA	218B 91.5	25.0 203.0	34-09-49 118-11-44	145.4	168.25 94.25	74 CLEAR
KUSC APP	Los Angeles CA	BPED900724IC	218B 91.5	15.5 879.0	34-13-35 118-03-58	140.8	169.73 95.73	74 CLEAR
ERP exceeds Maximum value for HAAT-ERP/HAAT Combination exceeds value for International Agreements								

FM SEPARATION STUDY

Job Title :Shafter NCE FM

Separation Buffer 100 km

FCC DB Date : 08/28/90

Channel 215B (90.9 MHz)

Coordinates : 35-24-55 119-14-01

Call Status	City State	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-Tru	Dist. (km)	Req. (km)
KGFM LIC	Bakersfield CA	BLH4497	268B 101.5	4.8 390.0	35-26-20 118-44-23	86.5	44.94 24.94	20 CLEAR
KSBL LIC	Carpinteria CA	BLH810713AG	269A 101.7	0.31 247.0	34-27-55 119-40-37	201.1	112.91 97.91	15 CLEAR

** End of separation study for channel 215B **

3. Facilities Proposed

The proposed operation will be on channel 215 b (90.9 MHz) with a maximum lobe effective radiated power of 50.0 kilowatts. Operation is proposed with a 4 element Shively 6810-4-DA circularly polarized directional antenna, mounted on a pole at the top of a 212 meter guyed tower, as shown in Exhibit VB-8. The tower will be located 10.7 kilometers southeast of Shafter, California at 157° true. There are no other telecommunications users of this site. Details of the proposed directional antenna system are shown in Exhibits VB-10-A through VB-10-D. The only FM broadcast station within 10 kilometers of the proposed site is KKBB-FM, Channel 249 A, Shafter, California. The KKBB-FM site is located 3.25 kilometers from the proposed site. The 2X-Y intermodulation products produced by the proposed station and KKBB-FM fall on 84.1 and 104.5 MHz. The 84.1 MHz product falls within the video passband of Channel 6. The distance from the nearest Channel 6 station (KSBY-TV) and the intervening terrain between its transmitter site and the proposed coverage area make it unlikely that the Channel 6 signal is useable anywhere within the proposed coverage area. The nearest allotment on Channel 283 (104.5 MHz) is located at Lake Isabella, California, more than 70 kilometers from the proposed site and far outside the area where any receiver-induced intermodulation effects are likely to occur.

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a. NIER Calculations

Study of the area within 1000 meters of the proposed site reveals no other likely sources of non-ionizing radiation. Thus, the present ground level NIER values near the base of the proposed structure are believed to be negligible. Precise calculations are made only with regard to the levels from this proposal.

The power density calculations shown below were made using the techniques outlined in the EPA report titled: *An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM, and TV Broadcast Services* (Gailey & Tell, April, 1985). All calculations contained herein are based on the measured element patterns for the antenna, and follow the procedure shown in the Gailey and Tell report. The patterns were identified by applying the procedure outlined in the report to the measurement data contained in the report titled: *Element Pattern Measurements on FM Antennas* (EPA-520/ 6-85-107, June 1985).

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"Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. Equation #1, contained in the Gailey & Tell report and shown below, was used to calculate the ground level power density figures from each antenna at incremental distances from the base of its supporting tower.

$$S (\mu W/cm^2) = \frac{(\text{Adjusted ERP in Watts}) \times 1.64 \times 2.56 \times 100}{4 \times \pi \times (\text{Distance})^2}$$

Where: Adjusted ERP in Watts is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

Distance = distance in meters from the center of radiation to the calculation point.

Calculations of the power density produced by the proposed antenna system assume a Type 1 element pattern, which is the element pattern for the Shively 6810-4-DA antenna which is proposed to be used. Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

The highest calculated ground level power density occurs at a distance of 20 meters from the base of the antenna support structure. At this point the power density is calculated to be $184 \mu W/cm^2$.

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These calculations show that the maximum calculated power density produced at two meters above ground level by the proposed operation $184 \mu\text{W}/\text{cm}^2$, less than 19% of the applicable ANSI limit.

b. Blanketing Contour

The 115 dbu contour for the proposed facilities extends 2.79 kilometers from the tower, based on the calculation methodology shown in §73.318 of the Commission's Rules. The proposed transmitter site is located in the Greeley Oil Field, and the area within the proposed blanketing contour is essentially unpopulated. The height of the proposed tower and the vertical radiation characteristics of the proposed antenna should abrogate any adverse effects on other communications facilities in the vicinity of the proposed station. If such adverse effects occur, the applicant will be responsible for their amelioration as prescribed in §73.318 of the Commission's Rules.

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FACILITIES & COVERAGE CONTOURS

PROPOSED FM RADIO STATION

SHAFTER, CALIFORNIA

Channel 215 90.9 MHz

Class B, Directional Antenna

HAAT = 100 Meters

TERRAIN AVG. = 106 Meters AMSL

DISTANCE TO CONTOURS
F(50,50)

RAD. CENTER = 206 Meters AMSL

AZIMUTH (°True)	HAT (m)	HAAT (m)	ERP (kW)	ERP (dBk)	70 dBu (km)	60 dBu (km)
0	114	92	50.00	16.99	26.2	43.5
45	127	79	50.00	16.99	24.5	41.0
90	114	92	48.98	16.90	26.1	43.3
135	109	97	24.49	13.89	22.7	38.4
180	100	106	15.14	11.80	21.1	36.0
225	95	111	36.98	15.68	26.7	44.1
270	91	115	50.00	16.99	29.1	47.2
315	98	109	50.00	16.99	28.3	46.2
*337	106	100	50.00	16.99	27.3	44.9

* - Extra radial, not included in average.

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Station: NEWFM	Frequency: 90.900 MHz	Height of Observer (ARP): 2.0 Meters
	<u>No. of Elements</u>	<u>Element Type</u>
Horizontal Polarization:	4	EPA REPORT T
Vertical Polarization:	4	EPA REPORT T
	<u>Height of Center (ARP)</u>	<u>Power (ERPd)</u>
	105.0 m	50.000 kW
	105.0 m	50.000 kW

